**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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| Applicant: Bryan D. Haynes, et al. | ) | Examiner: Matthew J. Daniels |
| Serial No.: 10/694,420 | ) | Art Unit: 1732 |
| Filed: October 27, 2003 | ) | Deposit Acct. No.: 04-1403 |
| Title: Method and Apparatus for Production of Nonwoven Webs | ) | Confirmation No.: 3355 |
| | ) | Customer No.: 22827 |

**APPEAL BRIEF**

Mail Stop Appeal Brief - Patents
Commissioner for Patents
Post Office Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The Applicants respectfully submit the enclosed Appeal Brief pursuant to 37 C.F.R. 41.37(c) and request that the final rejection of claims 1-17 be reversed and that the application be remanded to the Examiner for allowance.

## I. REAL PARTY IN INTEREST

The assignee Kimberly-Clark Worldwide, Inc. is the real party in interest.

## II. RELATED APPEALS AND INTERFERENCES

The Applicants, Applicants' legal representative, and assignee have no knowledge of other appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

## III. STATUS OF CLAIMS

Claims 1-17 are pending. The Applicants appeal the final rejection of claims 1-17.

## IV. STATUS OF AMENDMENTS

The Applicants filed an amendment after final on October 11, 2006, that did not amend any pending claims. The amendment after final was acted on by the Examiner and entered in the record.

## V. SUMMARY OF CLAIMED SUBJECT MATER

The present invention describes and claims a process for forming a nonwoven web, as shown in Figures 1-3. As recited in independent claim 1, the process includes providing a source of fibers 12 and subjecting the fibers to an electrostatic charge by passing the fibers through an electrostatic unit 18 (*see* para. [0024] – [0025], [0029], [0036]; Fig. 1). The electrostatic unit 18 includes a first side and a second side opposed to each other, and the electrostatic unit 18 has an array of protrusions on both the first side 20 and the second side 21 (*see* para. [0029], [0032], [0034], [0036]; Fig. 1, 2A, 2B, 3). The process further includes alternating the electrostatic charge from the first side

20 to the second side 21 and back to the first side 20 (*see* para. [0040], [0042]; Fig. 3), and collecting the fibers on a forming surface to form a nonwoven web (*see* para. [0031]; Fig. 1).

## VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Whether claim 1 is patentable under 35 U.S.C. 103(a) over PCT Publication WO 02/052071 (Haynes '071) in view of U.S. Patent 6,365,088 (Knight '088) and U.S. Patent 3,052,009 (Epstein '009).

## VII. ARGUMENT

A. Claim 1 is patentable under 35 U.S.C. 103(a) over PCT Publication WO 02/052071 (Haynes '071) in view of U.S. Patent 6,365,088 (Knight '088) and U.S. Patent 3,052,009 (Epstein '009).

The Applicants respectfully traverse the rejection of independent claim 1 under 35 U.S.C. 103(a) over Haynes '071 in view of Knight '088 and Epstein '009 for at least the reason that the rejection of claim 1 fails to include a motivation or teaching to combine the cited references to obtain the invention as claimed. Instead, the rejection merely combines elements found in various prior art patents based on the hindsight provided by the presently claimed invention. This is not a proper basis for a 35 U.S.C. § 103(a) rejection.[1] "Virtually all inventions are necessarily combinations of old elements. The notion, therefore, that combination claims can be declared invalid merely upon finding similar elements in separate prior patents would necessarily destroy virtually all

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[1] Graham v. John Deere Co., 383 U.S. 1 (1966) ("Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so.")

patents and cannot be the law under the statute, '103."[2] Thus, the task of the Patent Office is essentially a burden of proof not just to show prior patents with selected elements similar to respective parts of a claimed combination, but to show teachings to support obviously combining the elements in the manner claimed.

Specifically, the present rejection of claim 1 relies on the modification of Haynes '071 to incorporate selected teachings of Knight '088 and Epstein '009. After acknowledging that Haynes '071 does not disclose or teach an electrostatic unit having an array of protrusions on both the first side and the second side of the electrostatic unit, the rejection of claim 1 simply adds the teaching of Knight '088 to provide this missing limitation. However, the rejection provides no motivation or teaching for one of ordinary skill in the art to modify the disclosure of Haynes '071 by the teaching of Knight '088 to arrive at the claimed combination of elements recited in claim 1. Indeed, Haynes '071 teaches applying an electrostatic charge to fibers to form a nonwoven web, while Knight '088 teaches applying an electrostatic charge to an already formed nonwoven web. Therefore, it is difficult to see how one of ordinary skill in the art would have been motivated to move the electrostatic charge in Knight '088 to apply the charge to the fibers as recited in claim 1.

Similarly, after acknowledging that Haynes '071 also does not disclose or teach alternating the electrostatic charge from the first side to the second side and back to the first side, the rejection of claim 1 simply adds the teaching of Epstein '009 to provide this

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[2] Panduit Corp. v. Dennison Manufacturing Co., 1 U.S.P.Q 2d 1593, 1603 (Fed. Cir. 1987) (footnotes omitted).

second missing limitation. Although Epstein '009 states that the shaping and arrangement of alternating electrostatic pulses are familiar to any cathode ray tube engineer, this teaching provides no motivation for one of ordinary skill in the art to further modify the disclosure of Haynes '071, as already presumably modified by Knight '088, to arrive at the claimed combination of elements recited in claim 1. In addition, Haynes '071 teaches applying an electrostatic charge to fibers to form a nonwoven web, while Epstein '009 teaches alternating the electrostatic charge to crimp an already formed nonwoven web. Therefore, it is again difficult to see how one of ordinary skill in the art would have been motivated to move the electrostatic charge in Epstein '009 to apply the charge to fibers as recited in claim 1.

Therefore, Applicants respectfully assert that the 35 U.S.C. Section 103(a) rejection of claim 1 fails to include a motivation or teaching to combine the cited references to obtain the invention as claimed. Applicants similarly assert that the 35 U.S.C. Section 103(a) rejections of claims 2-4, 8, 9, 11-17 rely on the same combination of references without providing any motivation or teaching to combine the cited references to obtain the invention as recited in these dependent claims. Therefore, Applicants respectfully request withdrawal of the 35 U.S.C. 103(a) rejection of claims 1-17.

## VIII. CLAIMS APPENDIX A

See attached listing of pending claims involved in this appeal.

## IX. EVIDENCE APPENDIX B

The Applicants do not rely on any evidence submitted pursuant to 37 CFR 1.130, 1.131, or 1.132 or any other evidence entered by the examiner in this appeal.

## X. RELATED PROCEEDINGS APPENDIX C

The Applicants are not aware of any decision rendered by a court of the Board in any related appeals or interferences.

For at least the reasons discussed above, the Applicants respectfully submit that the final rejection of claims 1-17 should be reversed and that the application be remanded to the Examiner for allowance.

Respectfully submitted,

February 12, 2007

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## APPENDIX A – PENDING CLAIMS

The following is a listing of the claims involved in this appeal:

1. A process for forming a nonwoven web comprising

a. providing a source of fibers;

b. subjecting said fibers to an electrostatic charge by passing said fibers through an electrostatic unit having a first side and a second side opposed to each other, wherein the electrostatic unit has an array of protrusions on both the first side and the second side of the electrostatic unit;

c. alternating the electrostatic charge from the first side to the second side and back to the first side; and

d. collecting said fibers on a forming surface to form a nonwoven web.

2. The process of claim 1, wherein the electrostatic charge is generated between the array of protrusions of the first side and the array of protrusions of the second side and the array of protrusions of the first side and the array of protrusions of the second side are opposed to one another.

3. The process of claim 2, wherein the array of protrusions of the first side and the array of protrusions of the second side each comprise an array of pins.

4. The process of claim 3, wherein the array of pins of the first side and the array of pins of the second side are recessed within a cavity of an insulating material such that the pins essentially do not extend beyond the insulating material.

5. The process of claim 2, wherein the fibers are provided by a melt spinning process and the fibers are substantially continuous fibers.

6. The process of claim 2, wherein continuous fibers are subjected to pneumatic draw force in a fiber draw unit prior to being subjected to said electrostatic charge.

7. The process of claim 2, further comprising deflecting the fibers with a deflecting device prior to collecting the fibers on the forming surface.

8. The process of claim 1, wherein the fibers are substantially continuous fibers provided by melt spinning and are subjected to pneumatic draw force in a fiber draw unit prior to being subjected to said electrostatic charge, the array of protrusions of the first side and the array of protrusions of the second side each comprise an array of pins, the electrostatic charge is generated between the array of pins of the first side and the array of pins of the second side and the array of pins of the first side and the array of pins of the second side are opposed to one another.

9. The process of claim 8, wherein the array of pins of the first side and the array of pins of the second side are recessed within a cavity of an insulating material such that the pins essentially do not extend beyond the insulating material.

10. The process of claim 9, further comprising deflecting the fibers with a deflecting device prior collecting the fibers on the forming surface.

11. The process of claim 1, wherein the electrostatic charge is generated by a series of at least two separate electrostatic charge fields along a length of the electrostatic unit, each charge field having an array of protrusions on at least one of the first side or the second side of the electrostatic unit.

12. The process of claim 11, wherein the array of protrusions of the first side and the array of protrusions of the second side each comprise an array of pins.

13. The process of claim 12, wherein a first charge field is generated by the array of pins on the first side of the electrostatic unit and a second charge field is generated by the array of pins on the second side of the electrostatic unit.

14. The process of claim 13, wherein a first electrostatic charge field is generated between a first array of pins on the first side of the electrostatic unit and first array of pins on the second side of the electrostatic unit and a second electrostatic

charge field is generated between a second array of pins on the first side of the electrostatic unit and a second array of pins on the second side of the electrostatic unit.

15. The process of claim 14, wherein the first electrostatic field is generated from a potential on the first side of the electrostatic unit and the second electrostatic field is generated from a potential on second side of the electrostatic unit.

16. The process of claim 11, wherein the array of pins of the first side and the array of pins of the second side are recessed within a cavity of an insulating material such that the pins essentially do not extend beyond the insulating material.

17. The process of claim 2, wherein an electrical potential is alternated from the protrusions on the first side to the protrusions on the second side and back to the protrusions on the first side.

## APPENDIX B – EVIDENCE

None.

## APPENDIX C - RELATED PROCEEDINGS

None.